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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,164	01/12/2004	Ronald Geurts	GIA1480	3353
25548	7590	06/16/2005	EXAMINER	
DLA PIPER RUDNICK GRAY CARY US, LLP			ALLAWI, ALI	
4365 EXECUTIVE DRIVE, SUITE 1100			ART UNIT	
SAN DIEGO, CA 92121-2133			PAPER NUMBER	
			2877	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/756,164		GEURTS, RONALD	
	<b>Examiner</b>		<b>Art Unit</b>	
	ALI ALLAWI		2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 7-11, and 15-17 is/are rejected.
- 7) ☒ Claim(s) 3-6, 12-14, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to because the item number in reference to the display, (14) in Figure 1 does not match that which is disclosed in the specifications, (146). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 10-11, 16-17 are rejected under U.S.C 102(b) as being anticipated by Aggarwal (6,239,867).

Regarding **claim 1**, Aggarwal discloses a fluorescence measuring device used in identifying gemstones comprising;

an ultraviolet radiation source that provides direct and trans radiation to the gemstone under test (col. 7, lines 50-54, see fig. 3);

a light detector configured to detect visible light emitted from the gemstone in reaction to the UV radiation (col. 5, lines 50-55, see fig. 3);

Regarding **claim 2**, Aggarwal discloses everything claimed, as above, in addition, the UV radiation source comprises of a plurality of light emitting diodes (see fig. 3).

Regarding **claim 10**, Aggarwal discloses a fluorescence measuring device and subsystem used in identifying gemstones comprising;

a light detector configured to detect visible light emitted from the gemstone in reaction to the UV radiation (col. 5, lines 50-55, see fig. 3);

a processing axis that allows for alignment of emission of UV radiation from upper and lower sources (col. 10, lines 25-30, see fig. 3);

a unitary stage used as mounting surface that is located between the upper and lower UV radiation sources which is configured to accommodate and align the gemstone under test (col. 9, lines 32-37, see fig. 3);

Regarding **claim 11**, Aggarwal discloses everything claimed, as above, in addition, an ultraviolet radiation sources that provide direct and trans radiation to the gemstone under test (col. 7, lines 50-54, see fig. 3);

Regarding **claim 16**, Aggarwal discloses a method and associated apparatus for fluorescence measuring used in identifying gemstones comprising;

a light detector configured to detect visible light emitted from the gemstone in reaction to the UV radiation (col. 5, lines 50-55, see fig. 3);

a processing axis that allows for alignment of emission of UV radiation from upper and lower sources (col. 10, lines 25-30, lines 60-66, see fig. 3);

a unitary stage used as mounting surface that is located between the upper and lower UV radiation sources which is configured to accommodate and align the gemstone under test (col. 9, lines 32-37, see fig. 3);

Regarding **claim 17**, Aggarwal discloses everything claimed, as above, in addition, an ultraviolet radiation source that provides direct and trans radiation to the gemstone under test (col. 7, lines 50-54, see fig. 3);

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aggarwal (6,239,867) in view of Yifrach et al. (5,118,181).

As to **claims 7, 8, and 15**, Aggarwal discloses every thing claimed, as discussed above, with the exception of a user interface element that enables the control of output power and current to the upper and lower UV sources, however, to do so is known as taught by Yifrach. Yifrach discloses a microprocessor that is used for controlling the ultraviolet light source via a controller (52, fig. 3, col. 5, lines 9-12). It would have been obvious to one having ordinary skill in the art at the time of the invention to integrate a controller for adjusting the power and current characteristics of the ultraviolet sources to allow for identification of the gemstone by different frequencies of the light allowing multiple readings and providing a comprehensive means to identify the gemstone.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aggarwal (6,239,867) in view of Okazaki (4,508,449).

As to **claim 9**, Aggarwal discloses everything claimed, as discussed above, including color analysis, but fails to provide a spectral response that simulates the human eye spectral response, however, to do so is known as taught by Okazaki. Okazaki discloses a photo-detector to obtain a spectrum of the detected light, and an arithmetic unit for deriving the tristimulus values from the measured spectrum (col. 2, lines 15-31). It would have been obvious to one having ordinary skill in the art at the time of the invention to include a detector configured to obtain the tristimulus values to allow for measuring diamond colors which is of great practical advantage in that it can objectively measure the colors of diamonds, and can produce measured outputs which

can easily be converted to color grades of the type which have been widely used conventionally.

### ***Allowable Subject Matter***

Claims 3-6, 12-14, 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, taken alone or in combination, fails to disclose or render obvious a plurality of LEDs comprising an upper and lower LEDs that emit radiation along the same emission axis and more specifically, towards each other (claims 3-4, 12-13, and 18-19), a lower LED including a mounting surface configured to accommodate the gemstone under test in a table down position (5-6 and 14), in combination with the rest of the limitations of the claim.

### ***Conclusion***

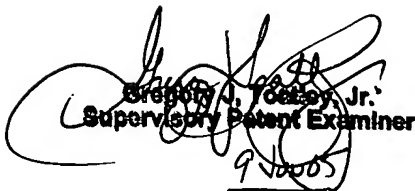
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### ***Fax/Telephone Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Allawi whose telephone number is (571) 272-8285. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gregory J. Toatley, Jr.  
Supervisory Patent Examiner  
9/20/05